REMARKS

Claims 1-21, 23, 25, 28-30, 33, and 35-44 remain pending in this application. Claims 23, 28-30, 33, and 25-42 are allowed.

The Examiner rejected claims 1-3, 6, 7, 9-15, and 18-21 under 35 U.S.C. § 103(a) as being unpatentable over British Telecom WO 95/31864 (***BT***) in view of U.S. Patent Application No. 6,452,767 (***Brooks***). Applicants respectfully traverse this rejection.

In the Final Office Action dated January 12, 2005, the Examiner argued that although ***BT*** does not disclose the claim limitation "wherein the monitoring takes place at or about the point where the test signal was applied", the combination of ***Brooks*** and ***BT*** renders claim 1 as obvious. Applicants respectfully disagree. The Examiner admits that ***BT*** does not make such a disclosure; however, the Examiner argues that it would be obvious or implicit because the Examiner stated that ***BT*** discloses tests on a telephone line. However, Applicants respectfully assert that this logical leap is based on a false premise. ***BT*** discloses a system for testing a telephone line for suitability using a field unit that is positioned between a customer's telephone and the network termination equipment to produce a test signal. Simply because the same telephone line is being tested, does not mean it is at or about the same point. There are many electrical obstacles on a telephone line. In this case, ***BT*** is directed to placing a field unit between two objects, i.e., customer's telephone and the network termination equipment and measuring the test results on another location. Hence ***BT*** is in contrast with the elements of claims 1.

Furthermore, the in the Final Office Action dated January 12, 2005, the Examiner does not prove that the above logical leap to make obvious the element of testing at or near the same point is made obvious by ***BT***. In other words, the Examiner doesn't support the assertion that ***BT*** inherently discloses element of the monitoring taking place at or about the point where the test signal was applied; in fact ***BT*** is directed to monitoring the test results at another location. Accordingly, ***BT*** is in contrast with elements of the claimed invention.

Additionally, In the Final Office Action dated January 12, 2005, the Examiner provides a hypothetical that supposes a tester would place the field unit elsewhere, however, the Examiner provides no evidence to support this hypothetical. In fact, the Examiner's assertions counter the disclosure of ***BT*** which calls for the field unit being specifically positioned between the customer's telephone and the network termination equipment. Therefore, Examiner's argument in the Final Office Action does not follow and Applicants respectfully assert that the Examiner withdraw the rejection.

Furthermore, in the Final Office Action dated January 12, 2005, the Examiner does not offer persuasive arguments or evidence to counter Applicants' assertion that those skilled in the art would not combine ***BT*** and ***Brooks*** to make obvious all of the elements of claim 1 of the present invention. As disclosed before, ***Brooks*** is directed to detecting arcing faults to a transformer, whereas ***BT*** is directed to a field unit that is positioned on a telephone line to perform field tests. It is clearly improper hindsight to combine these two disclosure (***BT*** and ***Brooks***) in an attempt to make obvious all of the elements in claim 1 of the present invention. Accordingly, various elements of claims 1 and 13 of the present invention are not disclosed or made obvious by ***BT***, and ***Brooks*** does not make up for this deficit.

There are several reasons why ***BT*** does not disclose or make obvious all of the elements of claims 1 and 13 of the present invention; and as described herein, ***Brooks*** does not make up for this deficit. For example, ***BT*** is directed to testing a telephone line between a consumer's network termination equipment and an exchange. Claims 1 and 13 of the present invention relate to a testing system adapted to determine the suitability of the line from a single point of the line. In contrast, ***BT*** discloses a system for testing a telephone line for its suitability using a field unit 5 positioned between the customer's telephone and the network termination equipment to produce a test signal and an exchange unit 6 positioned at the exchange. As called for in claim 1, Applicant's invention includes "applying a test signal at one point in the copper line" and "monitoring a response of the copper line at about the point where the test signal was applied." ***BT*** fails to teach or suggest providing and monitoring the test signal at a single point in the line. ***BT*** does not teach or suggest this feature, and this deficit if not compensated for by ***Brooks***. Claims 13, 20, and 21 also include a similar feature, and therefore, all of the elements of claims 13, 20, and 21 are not allowable for at least the reasons cited above.

The combination of ***BT*** and ***Brooks*** does not disclose or make obvious all of the elements of claims 1, 13, 20, and 21 for various reasons. For example, those skilled in the art would not combine the disclosure of ***BT*** and ***Brooks*** to make obvious all of the elements of the claimed invention. For instance, ***BT*** is directed to testing a telephone line between a consumer's network termination equipment and an exchange. ***BT*** discloses a field unit that is positioned on a telephone line to perform field tests. In stark contrast, ***Brooks*** is directed to detecting arcing faults relating to a transformer. Without using *improper* hindsight reasoning, those skilled in the art would not be motivated to combine disclosures of such diverse respective subject matter. ***Brooks*** is directed to providing a test signal that provides a rate of change of current or voltage

on a test file to detect whether an arcing occurs. Those skilled in the art would not combine the disclosure of arcing fault detection with the subject matter testing of a telephone line. Generally, substantial energy is needed to provoke an arc in a transformer (Brooks), wherein small signals, such as telephone signals, are the subject matter of ***BC***. Therefore, there are no logical or persuasive arguments why ***Brooks*** and ***BT*** would be combined by those skilled in the art. Additionally, the Examiner does not provide evidence or arguments to support the contention of combining ***BT*** and ***Brooks***. Applicants contend that it is improper hindsight reasoning to combine the diverse disclosure of ***BT*** and ***Brooks*** and respectfully assert that those skilled in the art would not have done so.

Additionally, Applicants assert that even if, *arguendo,* ***BT*** and ***Brooks*** were to be combined, all of the elements of the claimed invention would still not be disclosed or made obvious. As stated by the Examiner (in the Office Action dated May 18, 2004), ***BT*** fails to explicitly disclose monitoring a response of the copper line at about the point where the test signal is applied. The Examiner uses ***Brooks*** to make obvious this element. However, Applicants respectfully assert that the test signal produced on the test wire is merely used to monitor an arcing fault. The Examiner cites Figure 6 and column 9, line 36-67 of ***Brooks*** to support such an argument. The Examiner stated that ***Brooks*** provides the element of monitoring the response of the copper line. Applicants respectfully assert that the monitoring of the arcing fault, which is brought about by simulating an arcing fault does not make obvious the element of monitoring a response of the copper line at about the point where the test signal is applied. The simulation of an arcing fault in ***Brooks*** is used to ensure that an arcing fault would be properly detected by the sensor. This is performed to ensure that, in the event of an arcing fault, a

triggering of a line interrupt occurs in order to disconnect the load from the power source in a phase line that is disclosed by ***Brooks***. The disclosure that an arcing fault is simulated and the arc is detected somewhere on a line of a transformer, in combination of the disclosure of ***BC***, does not read upon the monitoring of the response of the copper line to the test signal when a signal is present.

Additionally, claim 1 of the present invention calls for monitoring about the point where the test signal is applied, wherein the arc may have taken place in ***Brooks*** somewhere on the transmission line and it does not detect the arc about any given point. ***Brooks*** merely performs a test to see whether a simulated arcing fault was detected as being present on a line relating to a transformer. Therefore, even combining ***Brooks*** and ***BC***, all of the elements of claims 1, 13, 20, and 21 would not be taught, disclosed, or made obvious by BC, ***Brooks***, or their combination.

Claims 20 and 21 are allowable for at least the same reasons provided above. Claim 20 is directed to testing the line at the subscriber's premises, an arrangement clearly not taught or suggested by ***BC***, ***Brooks***, or their combination. ***BT*** requires one presence at the subscriber's premises and another presence at the termination equipment. Accordingly, **BT** does not test at the subscriber's premises and ***Brooks*** does not make up for this deficit. Also, claim 21 is directed to a test unit including a signal generator, a monitoring circuit, and a processing unit. ***BT*** requires separate units remotely installed and Brooks does not make up for this deficit. Therefore, all of the elements of claims 20 and 21 would not be taught, disclosed, or made obvious by ***BC***, ***Brooks***, or their combination.

Independent claims 1, 13, 20, and 21, are allowable for at least the reasons cited above. Additionally, dependent claims 2-3, 6, 7, 9-15, and 18-19, which depend from independent claims 1, 13, 20, and 21, respectively, are also allowable for at least the reasons cited above.

The Examiner rejected claims 4, 5, 8, 16, and 17 under 35 U.S.C. § 103(a) as being unpatentable over ***BT*** in view of U.S. Patent No. 6,452,767 (***Brooks***) as applied to claims, 1, 13, 20, and 21 above and in further view of U.S. Patent No. 6,137,839 (***Mannering***). Applicants respectfully traverse this rejection.

Applicants respectfully disagree with Examiner's contentions in the Final Office Action dated January 12, 2005 regarding the disclosure of ***Mannering***. Applicants respectfully assert that ***Mannering*** does not make up for the deficit of ***BT*** and ***Brooks***. ***Mannering*** is directed to performing a Fourier transform upon a signal in an asymmetric digital subscriber line. ***Mannering*** merely discloses a splitter being present, which does not anticipate or make obvious the subject matter of determining a need for a filter based upon monitoring the response of a copper line, as called for by claim 5 of the present invention. As discussed above, claim 5, which depends from claim 1, includes the additional feature of determining the need for a filter based on the monitored response of the copper line. The Final Office Action merely asserts a splitter being present in ***Mannering***. This does not equate to determining a need for a filter based on the monitored response of the copper line. Neither ***BT*** nor ***Mannering*** teach or suggest this feature. Accordingly, Claim 5 is itself patentable for these additional reasons. Hence, the addition of ***Mannering*** to the disclosure of ***BI*** and ***Brooks*** does not make obvious all of the elements of claim 5.

In the Final Office Action dated January 12, 2005, regarding claim 8, the Examiner asserts that ***Mannering*** explicitly discloses a non-linear device. However, Applicants respectfully assert that ***Mannering*** does not disclose a non-linear transmission line testing device. Additionally, ***Mannering*** does not disclose identifying a non-linear characteristic based upon monitored response of a copper line. Therefore, the addition of ***Mannering*** to the disclosure of ***BI*** and ***Brooks*** does not make obvious all of the elements of claim 8.

Claim 4, which depends from claim 1, calls for one or more user devices comprising a plurality of user devices including at least one telephone and at least one computer. Adding the disclosure of ***Mannering*** to the disclosure of ***BT*** and ***Brooks*** does not make obvious all of the elements of claim 4. ***Mannering*** does not make up for the deficit of ***BT*** and ***Brooks*** in relation to claim 4, as described above in the context of claim 1.

As discussed above, claim 8, which depends from claim 1, includes the feature of identifying a non-linear characteristic based on the monitored response of the copper line. The Examiner uses ***Mannering*** to make obvious this element. However, merely acknowledging the presence of non-linear characteristics does not equate to determining the presence of such based on the monitored response of the copper line. ***BT***, ***Brooks***, nor ***Mannering*** teach or make obvious this feature. Accordingly, Claim 8 is itself patentable for these additional reasons. Additionally, claims 16 and 17, which depend from claim 13, call for elements that are not taught or made obvious by ***BT*** and ***Brooks***, as described above, and ***Mannering*** does not provide the missing subject matter of claims 16 and 17.

Adding the disclosure of ***Brooks*** to ***BT*** and ***Mannering*** would still not provide one skilled in the art with the ability to make obvious all of the elements of claims 4, 5, 8, 16, and 17. As described above, ***Brooks*** does not disclose monitoring the response of a copper line at about the point where the testing is applied, which by dependency is included in claims 4, 5, 8, 16, and 17. Therefore, adding the disclosure of ***Brooks*** to ***BT*** and ***Mannering*** would not disclose or make obvious all of the elements of claims 4, 5, 8, 16, and 17. Additionally, as described above, one skilled in the art would not combine ***BT*** with ***Brooks*** or ***Mannering***, which is directed toward a digital subscriber loop. The arc fault detection in a transformer disclosed by ***Brooks*** would not prompt or motivate one skilled in the art to combine such subject matter with ***Mannering*** and ***Brooks***. Additionally, even if ***Brooks*** were to be combined with ***BT*** and ***Mannering***, all of the elements as described above still would not be disclosed, taught, or made obvious by their combination. Therefore, claims 4, 5, 8, 16, and 17 are allowable for at least the reasons cited above.

As described above, independent claims 1 and 13 are allowable for at least the reasons cited above. Additionally, dependent claims 4, 5, 8, 16, and 17, which depend from independent claims 1 and 13, respectively, are also allowable for at least the reasons cited above.

The Examiner rejected claims 25, 43, and 44 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,014,425 (***Bingel***) in view of the ***BT***. Applicants respectfully traverse this rejection.

In the Final Office Action dated January 12, 2005, the Examiner stated that ***Bingel*** does not explicitly teach a computer system being adapted to contact a vendor for supplying service

using out-of-band data transmission. The Examiner then provides hypothetical possibilities, such as "...one of the customer premises can be a vendor, and the PC 150 at the CP can be used to contact the vendor via the modem 110...". However, there is no evidence to support Examiner's hypothetical assertions to make obvious all of the elements of claim 25. Claim 25 calls for contacting a vendor for supplying service using the out-of-band data transmission protocol over the modem, providing the vendor with physical location information associated with the communication line, and receiving service availability data based on the physical location information. The Examiner asserts that ***Bingel*** inherently teaches this feature since it discloses an Internet network. Inherency requires that the feature must flow *inherently* from the cited art (emphasis added). Simply stating that "the customer premises can communicate with a vendor throughout the internet for providing the customer premises' physical information as well as requesting a service availability data from the vendor", of the hypothetical from the Final Office Action described above, does not equate to an actual teaching or making obvious the subject matter of claim 25. ***Bingel*** nor ***BT*** mention contacting a service provider for purposes of receiving service availability data. Simply because the Internet could be used for such a contact is not a teaching or making obvious of that feature, given that neither reference even hints at such. Additionally, ***BT*** does not make up for this deficit. Accordingly, the Final Office Action fails to establish a *prima facie* case of obviousness. Applicants respectfully request the rejection of claim 25 be withdrawn, a request that claim 25 be allowed.

Regarding claim 43, in the Final Office Action dated January 12, 2005, the Examiner stated that the Examiner agrees with Applicants that neither ***Bingel*** nor ***BT*** makes obvious the subject matter of determining a need for a local filtering device at a location of at least one of the

user devices based on determining that said communication line is an interfering device. The Examiner asserted that this element was not called for in claim 43. Applicants respectfully assert that claim 43, as amended, calls for all of these elements, and hence, is now allowable. ***Bingel*** in combination with ***BT*** does not disclose all of the elements of claim 43. For example, neither ***Bingel*** nor ***BT*** makes obvious determining a local filtering of a location of a user device in response to determining if one user device is an interfering device, as called for by claim 43 of the present invention. ***Bingel*** does not disclose disconnecting a user device from the communication line and repeating the monitoring to determine with the disconnected device is an interfering device, as called for by claim 43. Although ***Bingel*** discloses repeating the testing (see col.8, lines 36-49), ***Bingel*** does not disclose disconnecting a device and repeating the testing to determine if the disconnected device is an interfering device. Adding the disclosure of ***BT*** does not rectify ***Bingel's*** lack of disclosure. Therefore, combining ***Bingel*** with ***BT*** still would not make obvious all of the elements of claim 43 of the present invention. Accordingly, claim 43 is allowable. Further, as stated by the Examiner, the element of determining a need for a local filtering device at a location of at least one of the user devices based on determining that said communication line is an interfering device is not disclosed or make obvious by ***Bingel*** nor ***BT***, and therefore, claim 43 (as amended) is allowable.

Independent claims 25 and 43 are allowable for at least the reasons cited above. Additionally, dependent claim 44, which depends from independent claim 43, is also allowable for at least the reasons cited above.

Applicants acknowledge and appreciate that the Examiner asserted that claims 23, 28-30, 33, and 35-42 contain allowable subject matter and therefore, are allowable. Additionally, in

light of the arguments and amendments provided herein, Applicants respectfully assert that all claims of the present invention are allowable.

In light of the amendments and arguments provided hererin, reconsideration of the present application is respectfully requested.

If for any reason the Examiner finds the application other than in condition for allowance, the **Examiner is requested to call the undersigned attorney** at the Houston, Texas telephone number (713) 934-4069 to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

Date: March 14, 2005

WILLIAMS, MORGAN & AMERSON, P.C.
CUSTOMER NO. 23720

By: _____

Jaison C. John, Reg. No. 50,737
10333 Richmond, Suite 1100
Houston, Texas 77042
(713) 934-7000
(713) 934-7011 (facsimile)
ATTORNEY FOR APPLICANT(S)

IN THE DRAWINGS

Applicants acknowledge that the Examiner has accepted the drawings filed on March 2, 2004.